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Towards an Integrated Curriculum

A School Resource Guide

1993

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Cette publication est également offerte en français sous le titre suivant : *Vers un programme d'études interdisciplinaire : Guide de planification à l'intention des écoles, 1993.*

Introduction

To live successfully in today's and tomorrow's world, all Canadians need qualities that will help them to understand and respond constructively to change. One of the most important of these qualities is the ability to apply existing skills and knowledge in new ways in order to meet needs and solve problems as they arise. This ability can be developed by encouraging students to practise using their skills and knowledge in one field to learn in another and to relate their learning to real-life situations. An integrated curriculum is one that is designed to develop this ability in students by helping them to see the links between different subject areas and understand that what they learn is meaningful in the context of the world outside the school.

The purpose of this document is to assist principals, teams of teachers, and individual teachers to make progress towards an integrated curriculum.

Why Integrate Curriculum?

Many of the problems that presently confront our society result from our failure to perceive the world as a whole – whether by ignoring the broader impact of local events or by neglecting to consider the long-term consequences of present activities.

Most challenges students will face in life demand an integrated response. In solving a practical problem we find it necessary to look at the question "in the round", to consider it in relation to ideas and information from a number of different fields.

Clearly, it is important for students to be able to relate what they learn in school to a larger context. There is evidence to suggest, however, that schools need to take a more active role in helping students to make such connections. In schools where the curriculum is organized into subjects, units, and lessons, students often have difficulty in seeing how concepts in one subject relate to those in another. Learning is not enhanced when information and skills are introduced in isolation, without reference to a pattern or context that would link and give meaning to the information.

A considerable body of research supports the view that the mind naturally searches for patterns and connections as we seek to understand phenomena and create meaning. Such findings suggest that there is merit in the attempt to design curriculum that mirrors the mind's natural search for patterns.

Individual subjects continue to be useful ways of organizing learning, since we need to present concepts and skills to students in a systematic way. But students also need to be able to use their learning outside the particular subject or discipline, and the integrated curriculum can help them to effect the necessary transfer of knowledge and skills from one area to another.

An integrated curriculum also has the potential to alleviate the problems of curriculum overload and fragmentation. As society changes and the frontiers of knowledge expand, the curriculum is under pressure to accommodate new material. A curriculum organized along traditional lines becomes a constantly expanding body of knowledge that must somehow be fitted into a finite school day. By contrast, a curriculum that focuses on the relationships between subjects promotes learning that applies to several disciplines at the same time, and may allow teachers to streamline curriculum.

Approaches to Integrating Curriculum

In attempting to deliver an integrated curriculum, teachers need first to identify and evaluate a variety of approaches to doing so. They can then collaborate with colleagues to develop a plan for working towards an integrated curriculum using a specific model, elements from several models, or a progression of models.

Approaches can range from those that retain clear subject boundaries while establishing interdisciplinary links to those that largely dispense with the traditional subject divisions. For example, one approach, suggested by Miller et al (see list of resources, p. 8), is to focus on broad themes (e.g., winter) or human processes (e.g., decision making). Fogarty (see list of resources, p. 8) describes ten models or approaches to integration that, viewed together, constitute a continuum from integration within a subject to self-directed learning.

The approaches used should be chosen according to what is deemed most appropriate for a particular set of circumstances. The selection process can be facilitated by considering questions such as the following:

- Which models or approaches are best suited to the students? (Consider such factors as needs, interests, learning styles, particular circumstances that affect students' learning, etc.)
- Which models or approaches draw most effectively on the teachers' expertise and strengths?
- With which models or approaches do teachers feel most comfortable?
- Which model or approach do teachers, the principal, and parents feel is most likely to succeed?

Curriculum planners may decide to begin with the most discipline-based of the approaches available, on the grounds that it will be closest to most people's experience. As interdisciplinary study becomes more familiar, a more clearly cross-curricular, skills-based approach could be introduced. When teachers become accustomed to using cross-curricular approaches they often discover that the possibilities for integrated study are unlimited, that subject boundaries become less important, and that students can benefit from exploring a variety of issues that do not specifically relate to any traditional curriculum area.

The choice of approach may be influenced by the degree to which schools are already committed to integrated studies. In some schools, curriculum may presently be organized by discrete subjects, while in others it may be organized around broad themes or growth schemes.

Teaching the Integrated Curriculum

Teachers are accustomed to using a varied repertoire of teaching strategies in order to accommodate the range of student learning styles, interests, and abilities. They also need to determine which strategies are most effective for promoting cross-curricular learning. Possible strategies in this category include the following.

Problem Solving
Students identify a complex issue to explore in depth, possibly a topic currently in the news. Activities could extend over several weeks, require students to do detailed research, and involve the use of many thinking skills and life skills.

Product Development
Students do research to identify a product they can develop. They then design and make the product and draw up and implement plans for marketing it. This strategy involves the use of technological and design skills, among others.

Independent Research/Inquiry
Students may be assigned a topic or choose their own. Students should be able to see the relevance of the topic to the world in which they live, develop questions to focus their inquiry, do research, evaluate information, draw conclusions, and communicate results. This strategy involves the use of a broad range of skills, including thinking skills, literacy and numeracy skills, communication skills, organizational skills, and interpersonal skills.

Collaboration

The success of an integrated program requires coherent and continuous planning by all of the teachers working with a particular group of students. (As part of the planning process, teachers should consult regularly with their immediate predecessors as well as successors.)

Teachers need frequent opportunities to assess the relevance of the curriculum and its ability to meet students' needs. They also need opportunities to reflect on and discuss their own and others' teaching practices, to share successes and problems, and to work with both students and other teachers to find solutions.

It is important for school boards and principals to find ways to adapt the school organization and program to allow teachers to meet regularly with other teachers in order to discuss concerns related to curriculum design and delivery. A variety of mechanisms and strategies could be used to promote collaboration. These include:

- coaching programs;
- mentoring programs;
- provisions for team planning;
- provisions for team teaching;
- provisions for teleconferencing;
- teacher visitation programs: in-school, interschool, cross-panel;
- elementary/secondary-school co-operative programs.

Considerations in Planning Curriculum

A School-based Plan for Integrating the Curriculum

Planning is necessary to ensure the successful development and implementation of an integrated curriculum. The school-based plan should be developed by those who will be required to implement it. Teachers' expertise in particular disciplines or curriculum areas is the key resource in identifying the interdisciplinary links that should be highlighted.

While development and implementation may begin with a group of interested teachers, the development process should be designed to ensure that ultimately all staff members are involved in discussions and decisions about programs, organization, and implementation procedures.

The Role of the Principal

It is the principal's responsibility to examine the school's existing curriculum and procedures for program delivery in the light of school board policies and expectations.

The principal's responsibilities also include:
- creating a climate for change;
- working with school staff to develop a general statement about the kinds of curriculum changes needed;
- ensuring the involvement of all staff in developing a school plan of action;
- ensuring the meaningful involvement of parents, students, and members of the community in the curriculum-development process;
- promoting collaboration among teachers across divisions and in both the elementary and secondary panels;
- ensuring that procedures are established to provide for ongoing curriculum renewal;
- facilitating regular communication among teachers, parents, students, and the education community;
- providing opportunities for continuous staff development;
- identifying and providing necessary resources on an ongoing basis: e.g., personnel, time, materials, and money;
- creating a climate that encourages innovation and risk-taking.

Suggested Ground Rules

Those with experience in curriculum planning have identified a number of ground rules that can facilitate the process. For example:

- Planning groups should be small. A team of more than six can be cumbersome.
- In curriculum-planning groups, the majority of members should be teachers who will be implementing the plan. This reduces the risk that the plan will not work in the classroom.
- The team should allow ample time to talk about and understand the process and objectives.
- The team should start slowly and plan, implement, and review the curriculum in small segments.
- The team should begin by discussing what is already taught and finding commonalities among subjects.
- Artificial or forced integration should be avoided. Experts in the subjects involved should be consulted about whether the curriculum connections being identified are appropriate.
- Initially, planning teams should be composed of interested volunteers, regardless of their areas of expertise.

There is reason to approach the process with optimism. The opportunities for building bridges between disciplines are abundant. In a supportive environment the potential obstacles to the successful development and implementation of an integrated curriculum can be readily overcome. The search for connections and similarities may permit duplications to be eliminated. This in turn may allow resources to go farther and timetables to be streamlined.

A Checklist

The following checklist could be used to gather information, stimulate thought and discussion, and provide a basis for developing a school-based plan for integrating curriculum.

- *School Organization*
  - blocks of time
  - semesters
  - rotary timetables
  - facilities
  - classroom arrangements for team teaching
  - timetables
  -
  -

- *Staffing*
  - skills/knowledge
  - qualifications
  - team-building activities
  - co-operative planning skills
  - attitudes and morale
  - interests and talents
  -
  -

- *School-wide Services*
  - library resource centres
  - career-planning services
  - guidance and counselling services
  - procedures and services for exceptional students
  - teacher-assistants (in-class)
  - resource-withdrawal facilities
  - classroom support models
  - teacher-sponsor/mentor programs
  - peer-tutoring programs
  - provisions for school-community liaison
  -
  -
  -

- *Resources*
  - audio-visual
  - electronic
  - teacher-developed
  - commercial
  - people
  - community agencies
  -

- *Curriculum*
  - program development and renewal procedures
  - program-evaluation procedures
  - teaching/learning processes and strategies
  -
  -
  -

- *Evaluation*
  - student assessment and evaluation strategies
  - promotion policies
  - reporting procedures
  -
  -
  -

- *Teacher In-service Opportunities*
  - teacher visitations (in-school, inter-school, other jurisdictions)
  - short courses
  - coaches
  - workshops
  - guest speakers
  - teacher mentors or partners
  - exchanges (short-term, long-term, cross-panel)
  -
  -

- *School-Community-Home Partnerships*
  - mechanisms for involving parents and students in the planning process
  - procedures for communicating program changes to parents and students
  - procedures for co-ordinating school and community support services
  - mechanisms (for involving community resources in program delivery)
  -
  -

Planning Model for Integrating the Curriculum

School: _____ **Date:** _____

Principal: _____ **Teacher(s):** _____

_____

_____

Expectations: Students will be able to see their learning experiences as meaningful and relevant and improve their overall achievement and performance.

Study Focus: _____

Objectives/ Learning Outcomes	Subjects/ Areas of Study	Person(s) Responsible	Resources	Assessment Procedures	Time Lines

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Suggestions for further changes _____

Selected Resources

Association des enseignantes et des enseignants franco-ontariens. "Milieu d'intégration". *Entre nous*, vol. 20, no. 2 (1987).

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